# Cosure Choricles

**MAY 2001** 

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Closure Chronicles is published quarterly by Environmental Management's Office of Site Closure. If you would like to receive a copy, please contact Mary Pearl, EM-30, at (301) 903-7424 or by e-mail at Mary.Pearl@em.doe.gov

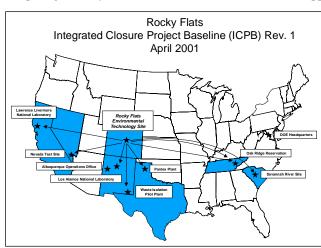
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# DOE Develops and Implements the First Integrated Closure Project Baseline

In January 2000, the Department of Energy (DOE) awarded a closure contract at the Rocky Flats Environmental Technology Site (RFETS) to Kaiser-Hill Company, LLC (K-H). This closure contract is one of the first examples of shared government/contractor responsibility developed through the contract negotiation process. Its statement of work identifies specific actions and deliverables as being the responsibility of DOE, formally designated as Government Furnished Services and Items (GFS/I), requiring that they be

delivered to support the closure project's schedule. These GFS/I elements can require significant government resources, and in some cases may affect assets



designated for use by other DOE missions. In order to meet the GFS/I commitments outlined in the closure contract, as well as to optimize utilization of complex-wide resources, DOE recognized the need to identify and develop a rigorous and disciplined project management approach for executing its responsibilities and commitments.

The DOE Office of Site Closure, Rocky Flats Site Team, which is responsible for formulating, planning, and executing DOE actions to deliver external GFS/I elements to support the RFETS Closure Project, teamed with the Rocky Flats Field Office (RFFO) to develop detailed project baselines for each of the GFS/I components, as well as other Departmental actions necessary to support the closure contract and closure activities. The purpose of the resulting Integrated Closure Project Baseline (ICPB) is to provide discipline, formality, and structure to the planning, documentation, and tracking of DOE responsibilities and contract commitments in support of the

K-H Closure **Project** Baseline (CPB) schedule for closure of the RFETS. The ICPB is key to successful execution of the Rocky Flats

Closure Contract, as it provides a critical tool for project delivery and contract management.

The ICPB represents all work to be completed by DOE and K-H to meet the definition of site closure outlined in the Rocky Flats Closure Contract. The ICPB contains the scope, schedule, and cost associated with integrating the K-H CPB, RFFO baseline, and the DOE GFS/I projects. Specifically, the DOE scope includes all activities, services, items, and

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approvals necessary to support off-site shipping of Special Nuclear Materials (SNM), and waste streams currently onsite.

The extensive integration necessary to close the RFETS safely and within the contract period of performance requires the cooperation of many DOE programs and sites. DOE also recognizes the inherent complexity and uncertainty associated with delivering its GFS/I commitments. As a result, a quantitative risk management tool was employed to identify those areas having high potential for schedule slip and to develop the mitigation strategies necessary to reduce the risk of missing the target date for delivery of GFS/I commitments.

The Rocky Flats Site Team has developed a charter statement to communicate the goals and objectives of the ICPB process as well as to obtain support and concurrence from all affected organizations including RFFO, other Office of Environmental Management (EM) Headquarters Offices/Programs, other DOE sites, and K-H. The Rocky Flats Site Team also has created a

schedule of activities necessary for developing the ICPB. This master schedule ensures that all the steps necessary to build the ICPB are captured and optimally sequenced.

#### **Rocky Flats ICPB Consists of:**

- Work Breakdown Structure (WBS) and associated scope statements
- Logic-driven Project Primavera Planner (P3) schedules
- Links to the K-H Closure Project Baseline
- Independent validation of schedule activities by affected organizations
- Resource loading
- Schedule optimization analysis
- Risk assessment
- Project Management Plan

Complementing the charter statement, the master schedule is a tool to communicate the process, sequence, and significance of the ICPB development process. These

two items are vital components of the Rocky Flats ICPB Project Management Plan (PMP) currently under development. In addition, the PMP will address such topics as strategy and objectives, ICPB development, organization and responsibilities, project risk and mitigation planning, performance monitoring and reporting methodology, and change management.

Revision 1 of the ICPB was presented to representatives from RFFO and K-H at a meeting at RFETS in April 2001 with the understanding that there is much work left to do. The next steps in implementing the ICPB include: developing a strategy to reconcile and align the K-H CPB and DOE ICPB schedules; continuing to evaluate areas for potential schedule acceleration; initiating monthly and/or quarterly earned value status reporting; finalizing the risk assessment process; and developing formal risk mitigation plans.

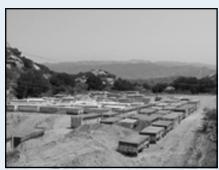
For further information, contact Frank Sheppard, EM-33, at (301) 903-4982 or e-mail at Frank.Sheppard@em.doe.gov

#### Disposal of Soil from the ETEC Site

his past summer and fall, approximately 14,800 tons of soil were excavated from the Former Sodium Disposal Facility as a part of the cleanup of the Energy Technology Engineering Center (ETEC) site located about 30 miles north of Los Angeles, California. The soil was excavated as it was found to be contaminated with hazardous constituents (dioxins, polychlorinated biphenyls, and mercury) above applicable limits. While several radioactive isotopes (strontium, cesium, thorium, and potassium) were identified in the soil, the detected levels were found to be consistent with background levels for the site.

In May 2000, the California Department of Health Services (DHS) stated that the soil did not need to be disposed of at a facility licensed for radioactive materials since its concentrations of radioactive constituents were similar to those that exist naturally in soil at the site (i.e. background). However, in June 2000, Senator Barbara Boxer of California,

along with representatives of a local stakeholder organization, raised objections and asked the DHS to reevaluate whether disposal should be at a radioactive disposal facility or at a hazardous waste site. The Department of



Rolloff bins full of soil await disposition

Energy (DOE) agreed not to ship any of the soil offsite pending the outcome of the evaluation. During this period of time the excavated soil was stored onsite in approximately 800 rented rolloff bins.

In a letter to Senator Boxer in December 2000, DHS stated that it had "concluded, with confidence, that the soils at issue do not present a radiologic health hazard." Further, it was stated that the soils "may legally and safely be disposed of at a permitted Class I hazardous waste facility."

In January 2001, the first of several hundred truck loads of stored soil began to be shipped offsite to a permitted hazardous waste disposal facility owned by Safety-Kleen, Inc., in Buttonwillow, California. These operations went about in a smooth manner in spite of concerns voiced by residents and environmental activists that the material should be disposed at the Envirocare radioactive disposal site in Utah. The shipping and disposal operations were completed on March 23, 2001, about a month ahead of schedule as a result of using large capacity trucks.

For more information, contact Robert Fleming, EM-34, at (301) 903-7627 or e-mail at Robert.Fleming@em.doe.gov

## Collaboration Yields Success for the Office of Site Closure by Jim Fiore

ver the past several years, the Office of Site Closure (OSC) has developed a closer working relationship with the Office of Science and Technology (OST). This closer relationship began when OST first implemented the "Focus Area approach" to developing and demonstrating technologies in the mid-1990s. This approach incorporated the problem holder into the OST decisionmaking process, including the decision of which technologies would be funded for additional development or demonstration. But the close relationship really began to show results when Gerald Boyd and I formalized our commitment to work together by including a member of each of OST's Focus Areas by matrix into each of OSC's Program Offices in November 1999.



Remote Excavator in operation

Gerald and I then challenged our organizations to find creative ways to work together to promote the use of new technologies at our sites.

The results have been nothing short of phenomenal! Working together, OSC and OST have accelerated a number of remedial actions and saved enormous amounts of money at a number of sites.

The Large Scale Demonstration
Project at Mound gave us the
WaterWorks Crystals and the NoChar
Absorbent Polymer, both of which give
us a solidification technology for liquid
waste that meets waste acceptance
criteria and minimizes the volume of
waste requiring disposal. Both of these
technologies were also applied at other
sites (the WaterWorks Crystals at
Ashtabula, Pantex, and the Laboratory
for Energy-Related Health Research; and

the NoChar Polymer at Ashtabula, Rocky Flats, and Sandia). That means they helped us make progress towards closure at Mound and helped us get closer to completing the other sites.

We have also had terrific results from the Accelerated Site Technology
Deployment at Brookhaven, where we applied the In Situ Object Counting
System and the BetaScint Fiber Optic
Sensor to provide near-real time
radioactivity assay results in our decommissioning activities at the
Brookhaven Graphite Research Reactor.
And on that same project, we have also been able to apply the diamond wire saw, which enables us to dismantle the large radioactive steel structures and highly reinforced concrete walls found in research reactors.

With OST's help, we have also reduced costs and accelerated cleanup. For example, at Fernald, the ground water was contaminated with uranium. The baseline technology to address this contamination (pump and treat) was estimated to require 27 years and cost \$81.6M. The Ground-water Re-injection Demonstration showed that an optimized extraction strategy could reduce the treatment time to 10 years and reduce the cost by \$14.3M. The ground-water re-injection technology is now fully deployed at Fernald.

A major benefit of some of the technologies we have deployed is the ability to improve protection for our workers. One way to protect them is to ensure they are not exposed unnecessarily to radioactive materials or radiation.

At Rocky Flats, we have been able to deploy a number of OST-developed or demonstrated technologies that help protect our workers. Rocky Flats has more than 900 glove boxes contaminated with plutonium that must be addressed before the site can close. To help enhance worker safety and reduce exposure risk during size reduction of these glove boxes, OST worked with the site to deploy the Inner Tent Chamber, which removes workers from unnecessary radiological exposures by separating them from direct contact with the materials being size

reduced.

Another way to protect our workers from potential hazards is the Remote Excavator, which enables a worker to operate a full-sized excavator using a series of remote controls and computer view screens. The worker is safely housed within a building rather than out in the field exposed to the heavy equipment and radiation hazards.

Then there is the "cool suit," a simple concept that continues to provide results. Workers in radiation zones wear multiple layers of protective clothing to protect them from the radioactivity in the materials they are handling. These multiple layers can lead to varying levels of heat stress, making the workers uncomfortable, and potentially endangering them. The cool suit provides a way to circulate cold water



Remote Excavator control station

through a vest worn by workers to help them control their body temperature during work activities. In addition to avoiding the hazards of heat stress, the cool suit enables workers to increase their productivity. First demonstrated at Fernald with support from OST, the cool suit has led to happier, more comfortable workers, and more rapid completion of our tasks at more than 15 of our sites. Some of the sites where the cool suit has been used are Argonne, Ashtabula, Columbus, Los Alamos, Mound, Nevada, Pantex, Oak Ridge, and West Valley.

With results like these, it is no wonder the Office of Site Closure looks forward to continuing to work with the Office of Science and Technology on the challenges we face as we pursue site closures and completions.

#### **PANTEX Refocuses on Ground-Water Cleanup**

In March 2000, the Environmental Management Program confirmed that trace amounts of trichlorethylene (TCE) were discovered in the Ogallala Aquifer within the Pantex Plant boundary near Amarillo, Texas. The sample contained eight parts per billion (ppb) of TCE, which exceeded the drinking water standards of five ppb for this compound. Although the amount of TCE found was quite small, the Department of Energy (DOE) considers this finding of significant concern because the contamination was found in the Ogallala Aquifer, the primary drinking water source for a vast area of

the Great Plains, including the City of Amarillo, whose well field is less than a mile from the northern Pantex boundary. DOE had previously detected and validated several hazardous constituents in the ground water at the site, but only in a perched aquifer that was generally not used for drinking water. Prior to the discovery of TCE in the Ogallala, ongoing ground-

water monitoring and cleanup efforts had been focused on controlling the contaminant migration in the perched aquifer. The discovery of contamination in the Ogallala triggered immediate public interest by adjacent landowners, the City of Amarillo, and regulatory authorities and was a catalyst for DOE complex-wide response.

Using the resources of the Office of Science and Technology's Subsurface

Contaminants Focus Area, a technical task team comprised of remediation specialists familiar with TCE contamination and associated technical issues was quickly formed to study and formulate a response plan. This plan was submitted to the Secretary in the summer of 2000. The team made specific recommendations to increase understanding of the nature and extent of contamination and to accelerate remediation efforts in the source areas. Acting decisively, Pantex reprioritized its environmental restoration activities to refocus their investigation on the Ogallala Aquifer, implementing several interim



DOE's Pantex Plant near Amarillo, Texas

corrective measures, conducting a soil gas survey to locate and quantify contamination sources in the overlying soils, and sealing old wells that could have provided a migration pathway for contamination into the aquifer.

In addition to giving technical advice, the team also recommended aggressive, open involvement with the stakeholders to increase trust and understanding of the problem and DOE's response actions. Many of these recommendations were based on lessons learned at other DOE sites, where open communication with stakeholders has proven to be the key to progress. Although subsequent testing has not detected TCE above drinking water standards in the drinking water aquifer, DOE is currently providing bottled water and carbon filtration systems to neighbors, has initiated a domestic well sampling program in the adjacent landowners' wells, and routinely includes stakeholders in technical reviews and project planning sessions.

An Innovative Technology

Remediation Demonstration (ITRD) team is working on identifying and testing new technologies to locate and clean up the sources of contamination in the soils and ground water at Pantex, where the contaminants are deep and the hydrogeology is complex. One of the technologies being evaluated for use at Pantex on the perched aquifer plume that contains TCE, metals, and

high explosive contaminants is In Situ Redox Manipulation. This technology, which has been successfully demonstrated at Hanford, creates a passive, reactive zone in the subsurface to destroy contaminants in the ground, avoiding costly and time consuming pump-and-treat methodology. Destroying the contaminant plume in the perched aquifer may prevent movement of contaminants downward into the Ogallala Aquifer.

Using the resources of the DOE complex, applying lessons learned, and showing willingness to respond to changes, Pantex's decisive actions have resulted in very positive changes in their environmental restoration program and stakeholder relations. Pantex is DOE's only weapons assembly and disassembly plant in the United States, and continued smooth operation of this plant is critical to national defense.

For more information, contact James Joyce, EM-34, at (301) 903-2151 or email at James.Joyce@em.doe.gov

#### Fernald Awarded STAR Status

On January 31, 2001, the Office of Environment, Safety and Health awarded Fluor Fernald with the Voluntary Protection Program STAR Status. The STAR Status announcement came one week after the site achieved another safety milestone of completing 7 million safe work hours. Fluor Fernald is the managing contractor at DOE's Fernald Environmental Management Project. The Voluntary Protection Program promotes safety and health excellence through cooperative efforts among labor, management, and government at DOE sites. The Program consists of three categories: STAR, MERIT, and DEMONSTRATION. Contractors that meet the requirements for outstanding performance receive STAR Status. STAR status is the highest safety performance and program honor that can be achieved.

## Rocky Flats Marks 100th Shipment to Waste Isolation Pilot Plant

Rocky Flats sent its 100th shipment to the Waste Isolation Pilot Plant (WIPP) in New Mexico on March 13, 2001. Although hundreds more shipments to WIPP will be needed to close Rocky Flats, reaching the first 100 is a significant milestone that demonstrates the site's ability to ship transuranic waste safely, routinely, and in full compliance with requirements. More importantly, shipping this waste off site reduces risks to Rocky Flats workers and the community.

Rocky Flats completed its first shipment to WIPP in June 1999, less than three months after the WIPP facility opened. Even with a four-month pause in shipping to meet new WIPP requirements, Rocky Flats has consistently led the nation in the number of shipments to WIPP. Rocky Flats' 100th shipment means that nearly 75,000 miles have been safely traveled by trucks transporting Rocky Flats' waste.

"Shipping waste to WIPP is not an easy task," said Marvin Brailsford, Material Stewardship Project manager. "Our success in shipping our first 100 is a tribute to Rocky Flats employees. They have demonstrated time and time again that they can meet the high levels of quality required of each waste drum that we ship to WIPP. They have also proven

that they can do it safely," he added.

Waste drums destined for WIPP must be packaged in accordance with strict quality controls. Characterization of a single drum of transuranic waste, required as part of the WIPP acceptance criteria, can take two to four weeks. The transuranic waste shipping program at Rocky Flats is routinely audited by WIPP officials to ensure compliance with



Rocky Flats' 100th shipment to WIPP

acceptance requirements. In March 2000, Rocky Flats was one of the first Department of Energy sites to achieve compliance with new WIPP requirements that allowed shipment of mixed waste (waste with chemically hazardous components mixed with transuranic waste) and Rocky Flats has maintained

compliance ever since.

Shipping of transuranic waste also entails a tremendous amount of coordination between projects involved in planning the movement of waste drums from point of generation through the battery of characterization activities and ultimately to loading into special casks for the journey to WIPP. Coordination between the Rocky Flats Field Office, WIPP, and State of New Mexico officials is also critical to the process.

Waste drums are shipped to WIPP in TRUPACT-II vessels. These vessels are loaded with drums in Building 664, then placed on specially designed trailers for transport to New Mexico. Construction of a new transuranic waste shipping facility for the Material Stewardship Project is underway just east of Building 440.

The new facility will contain two TRUPACT-II vessel loading stations, a drum staging area, and additional characterization equipment. The project will provide Rocky Flats with the capability to ship nine shipments each week to WIPP. The new facility will be operational later this year.

For more information, contact Karen Lutz, RFFO, at (303) 966-4546 or e-mail at Karen.Lutz@rf.doe.gov

#### Phytoremediation Demonstration Project Report Completed at ANL-W

n March 16, 2001, the Argonne National Laboratory - West (ANL-W) submitted the "Phytoremediation 2-Year Field Season Demonstration Project Report" to the Idaho Department of Environmental Quality (DEQ) and the Environmental Protection Agency - Region 10 (EPA) for approval. The report summarizes the results of phytoremediation employed to remediate cesium-137 and metals in soils at several sites within Waste Area Group 9 (WAG 9) at ANL-W. Results from analyses of both the soil and plant matter indicate that the plants (Kochia and hybrid Willows) extracted quantities of radioactive and inorganic contaminants consistent with greenhouse bench-scale testing done in 1998. The report recommends that

the phytoremediation effort be continued for two more years (three years less than originally estimated) and that a full verification sampling effort be conducted in 2002 to determine if remediation goals have been met.

The Record of Decision for WAG 9 was signed on September 29, 1998, and identified a selected remedy of phytoremediation with a contingent remedy of excavation and disposal. An "Explanation of Significant Difference" was issued which changed the remedial action for two of the original eight sites to the contingent remedy of excavation and disposal. The change to the contingent remedy for the two sites was warranted because the uptake rate of the contaminants during the bench-scale testing was less than anticipated and

would have resulted in an increase in the number of years necessary for phytoremediation to meet the remediation goals. These two areas were remediated in the spring of 2000. Two additional sites are still in use and will not undergo remedial activities until they are no longer needed. The last of the eight sites only requires institutional controls to be protective of human health and the environment.

The EPA and Idaho DEQ are currently reviewing the report and comments are expected in the next two months.

For more information, contact Shirley Frush, EM-34, at (301) 903-8159 or email at Shirley.Frush@em.doe.gov

# DOE Works Off Backlog of Title X Reimbursements to Uranium and Thorium Licensees

ne of Environmental Management's original cleanup programs was the Uranium Mill Tailings Remedial Action Project (UMTRA). Congress directed the Department of Energy (DOE) to clean up 22 "Title I" uranium mill sites because the Atomic Energy Commission had purchased all of the uranium from these sites. All of these sites had ceased operation by 1978 when Congress directed that all uranium mill sites be cleaned up. Surface cleanup of the Title I sites was completed by DOE in 1998.

In addition, there are about 25 "Title II" mill tailings sites that were still active in 1978. The primary market for the uranium from these sites was the electric utility industry, but 14 of these sites also sold material to the Federal Government, including one thorium processing site. In 1992, Congress passed Title X of the Energy Policy Act which said that DOE should share in the responsibility for the cleanup of Title II sites that sold uranium and thorium to the Federal Government. Although the site owners and licensees are fully responsible to perform the cleanup of their sites, DOE was directed by Title X to reimburse the licensees for a share of their cleanup costs attributable to the mill tailings that were generated as

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a result of the Federal purchases of uranium and thorium. These reimbursements are subject to several limitations, including a total cap of \$350 million for the uranium licensees and \$140 million for the thorium licensee. These amounts are adjusted annually for inflation.

Each year the licensees are allowed to submit a claim for their work performed during the previous year. DOE staff at the Albuquerque Operations Office review each claim and determine the amount of each claim that is eligible for reimbursement. The reimbursement funds for Title X are appropriated from the Uranium Enrichment Decontamination and Decommissioning Fund that is managed by Oak Ridge.

In fiscal year (FY)1994, Congress appropriated the first funds for reimbursement. However, until FY 2001, the appropriated funds were always less than the total approved claims and a backlog of unpaid claims was carried over from year to year. In both FY 2000 and FY 2001, Congress appropriated \$72 million for Title X, versus the \$30-\$40 million that had been appropriated annually since 1994. These larger appropriations allowed DOE to work off the backlog of unpaid

claims in December 2000.

In April of 2001, the planned FY 2001 payments were made to the licenses. As of April 2001, DOE has reimbursed \$204 million to the uranium licensees and \$146 million to the thorium licensee. DOE has reimbursed the thorium licensee for the total amount authorized by Congress.

Over the next six years, most of the sites are expected to complete their cleanups and the annual reimbursements are expected to decrease to \$10 million or less. In addition to the dollar caps on total reimbursement described above, Congress also limited reimbursements to each uranium licensee to no more than \$6.25 per dry short ton of tailings, adjusted for inflation. Four licensees have costs that exceed that amount. In 2008 the Secretary has the authority to decide whether or not to recommend reimbursement of any costs that exceed this dry short ton limit, which is estimated to be \$30-40 million in total.

For more information, contact David Mathes, EM-34, at (301) 903-7222 or email at David.Mathes@em.doe.gov

### "Site Closure" Training Schedule

The new site closure training course provides a regulatory overview of the closure and post-closure care requirements of the Resource Conservatioand Recovery Act and the Comprehensive Environmental Response, Compensation, and Liability Act and discusses the business management functions needed for closure, as well as long-term stewardship requirements. The course discusses new, effective ways to incorporate a wide range of institutional control and business closure activities into the overall site-wide planning process.

Upcoming sessions of the two-day course entitled "Cleanup Site Closure: Integrating Regulatory and Administrative Activities" are scheduled as follows:

May 21-22: Oakland, CA July 24-25: Denver, CO Nov 6-7: Chicago, IL

June 5-6: Aiken, SC Aug 14-15: Chicago, IL Dec 4-5: Washington, DC

June 12-13: Albuquerque, NM Sep 11-12: Richland, WA

The course is being offered throughout the Department of Energy complex under the auspices of the National Environmental Training Office (NETO). Description of the course (NETO429) and cost and registration information may be obtained from the NETO website at http://www.em.doe.gov/neto/.

For more information, contact Patrick Noone, EM-30, at (301) 903-2870 or e-mail at Patrick.Noone@em.doe.gov.

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#### **BCL Decommissioning Project Transuranic Shipping Cask**

with a goal of shipping 25 cubic meters of transuranic (TRU) waste out of the central Ohio area by the end of 2002, the Battelle Columbus Laboratories Decommissioning Project – Columbus Environmental Management Project (BCLDP-CEMP) is looking at a new Type B waste transport cask to expedite the shipments.

The project is aiming for a 2005 date to complete decontamination and decommissioning (D&D) activities at its West Jefferson, Ohio, site. An important element of that effort is the shipment of TRU to the Waste Isolation Pilot Plant (WIPP) outside Carlsbad, New Mexico, or another U. S. Department of Energy (DOE) approved temporary storage facility.

BCLDP's plan is to use the model CNS 10-160B cask, recently approved by the Nuclear Regulatory Commission. It is a commercial shipping container developed by Duratek (formerly Chem-Nuclear Systems) that can move up to ten 55-gallon drums of remote-handled TRU (RH-TRU) as one tractor-trailer load. The laboratory will also use the Transporter Model 2 or TRUPACT-II to transport CH-TRU or contact-handled waste. The latter system is provided directly by WIPP.

Use of the ten-drum cask means that the project will make two-thirds fewer waste shipments than would be required with the current reference PH-72B three-drum Type B cask. This means larger cost savings and increased safety.

The need to speed up shipments of TRU to a DOE-approved facility comes as Battelle begins to wind up its cleanup efforts that began in 1989. At that time, the Battelle labs that supported atomic energy research for the United States had been shut down for two years after 44 years of

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cold-war development activities. The Columbus laboratory initially signed on with the Manhattan Engineer District in 1943. During those four-plus decades a number of Battelle buildings and surrounding grounds in Columbus itself and in six buildings at the West Jefferson site, some 15 miles to the west, became contaminated with varying amounts of radioactive materials. Since 1989, the Columbus buildings have been cleaned and restored for the most part, and work has concentrated on the more heavily contaminated structures in the West Jefferson site.

In preparing for the potential use of the CNS cask, BCLDP performed a simulated loading and shipping of the container to New Mexico in September after several years of planning meetings and discussions with DOE and site officials. Project staff used remotehandling equipment to place the drums in the cask that sat on a tractor-trailer. The 10-160B cask was then transported along a DOE-approved route to the WIPP facility. WIPP employees completed the trial run with a simulated remote unloading of the cask.

The CNS 10-160B cask is made of two carbon-steel shells and a lead shield welded to a carbon-steel bottom plate. A 12-gauge stainless steel thermal shield surrounds and comprises the cask's outer shell. The cask is transported upright and equipped with two steel-encased, rigid, polyurethane-foam impact limiters attached to the top and bottom of the cask. Eight ratchet binders secure the impact limiters to each other. Four additional ratchet binders secure the cask to the transportation trailer. The cask is designed to transport 55-gallon drums of

waste assembled in two five-drum carriage units. Each carriage unit has five pick-up points that can be attached to lifting slings for low-level waste shipments or to a solid lifting mechanism for RH-TRU waste shipments.

BCLDP staff worked with CNS engineers to design and test the drum carriages and lifting devices. The result is an extremely robust yet simple loading and unloading system that can be deployed at practically any site that has a crane available. Miniature spy-type cameras mounted on the lifting unit and connected to an ordinary television set allows crane operators to move the drum carriages while shielded from any high radiation fields.

BCLDP RH-TRU waste is being packaged to meet existing WIPP certification requirements. BCLDP maintains detailed records of the waste generation and packaging processes, including audio and video records. RH-TRU wastes are loaded into steel or polypropylene liners in the high-energy cell at the West Jefferson site where the RH-TRU waste is placed pending shipment. About 45 of these steel linedcontainers have been packaged thus far. The first RH-TRU waste liner was removed from the site's former high-energy cell in June 2000 and packaged into a 55-gallon drum for eventual shipment and disposal at a DOE-approved storage site.

BCLDP plans to begin shipping from the West Jefferson site using the CNS 10-160B cask in the fall. Prior to that, however, Battelle will conduct an operational readiness review at the West Jefferson site. This review will include procedures and equipment required for remote loading of waste containers into the cask. Similar reviews will also be scheduled at the receiving facility. Each review will demonstrate the implementation procedures and process descriptions developed for the loading and unloading of the cask. BCLDP anticipates completing all technical demonstrations at the West Jefferson site and WIPP by the end of July.

For further information, contact Tom Baillieul, at (614) 760-7372 or e-mail at Thomas.A.Baillieul.at.DOE\_CL@OHIO.doe.gov

## **Employees Achieve Safety Milestone**

n February 5, 2001, employees of the Department of Energy Miamisburg Environmental Management Project and Babcock & Wilcox Technologies of Ohio, Inc., achieved a significant safety milestone. At the end of the work day, combined employee safe work hours surpassed 5 million without recording any lost time away from work injury sustained on the job. In honor of this achievement, an award will be presented to all employees.

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#### Federal Employee Transition - Priority Selection

One of the serious issues facing the program in accelerating closure at many of the sites is the retention of experienced and skilled staff until the job is complete. For some employees, seeing the end of their jobs at closure sites will naturally motivate them to seek employment elsewhere unless enhanced retention incentives are provided. Those employees who want to continue to work after their sites close should be offered employment at some other Department of Energy (DOE) element.

Legislation has recently been passed which allows DOE to offer enhanced retention incentives to encourage employees to stay at the accelerated closure sites managed by the Rocky Flats and Ohio Field Offices. This legislation provides for enhanced retention bonuses, increased annual leave ceilings, and the continuation of medical coverage after separation. The implementation of selected enhanced retention incentives is anticipated later this fiscal year. It is expected that offering employees the

opportunity to increase their annual leave ceilings will be implemented first, while awarding retention bonuses will be used as the sites enter the final two to three years prior to closing.

The DOE's Office of Environmental Management (EM) is also developing processes and alternatives for implementing priority selection to another DOE position when an employee's services are no longer required for site closure. One strategy being considered is to link the DOE-wide Priority Placement Program with an EM Enhanced Priority Selection Program. The DOE-wide program starts when an employee receives a Certificate of Expected Separation. In the case of EM closure sites, this certificate would be issued six months prior to an employee's expected separation. Employees under this DOEwide program essentially receive priority selection for vacancies for which they apply and are well qualified within their commuting area.

One approach to an EM Enhanced

Priority Selection Program is to offer the following additional assistance:

- Program could be extended to all closure sites and impacted Headquarters employees.
- List of all vacancies funded from EM accounts would be sent to all closure site personnel periodically.
- Employees applying for vacancies and determined to be qualified, not well qualified as in the DOE-wide program, would receive priority selection for any position funded from EM accounts, wherever located.
- Program would start whenever EM promulgates a list of surplus positions derived from closure sites Annual Transition Plans.
- Employees could be covered by both programs outside a defined commuting area.

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